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What is claimed

- 1. Method of detecting the reliability of a field of movement vectors of one image in a sequence of video images, characterized in that it includes a stage of calculating a stability parameter Det_Stab(t) for the field, on the basis of a comparison (4), over two successive images, of the number of occurrences of the majority vectors of the movement-vectors fields of each of these images, a field being defined as stable if the variation in the number of occurrences lies within a predefined bracket, and a stage of deciding on reliability (7) on the basis of this stability parameter.
- 2. Method according to Claim 1, characterized in that it also includes a stage of calculating a disturbance parameter Det_Dist(t) for the field, on the basis of a comparison (5), over two successive images, of the number of occurrences of the movement vector corresponding to the majority vector of one of the two images (2, 3), a field being defined as not disturbed if the variation in the number of occurrences lies within a predefined bracket, and in that the decision stage (7) is also based on this disturbance parameter.
- 3. Method according to Claim 1, characterized in that it also includes a stage of calculating a disturbance parameter Det_Dist(t) for the field, a field being defined as not disturbed if the variation in the number of occurrences of the zero vector in the movement-vectors field, between two successive images, lies within a predefined bracket, and in that the decision stage (7) is also based on this disturbance parameter.
- 4. Method according to Claim 1, characterized in that it includes a stage of calculating, for an image (t), a time-domain stability state Stabl_Stat(t) (6) on

the basis of the stability parameters $Det_Stab(t)$ for this image and of P-1 preceding images (4), a state being declared as stable if a minimum number Q of stable fields is detected among these P images, P and Q being integers such that P > Q, and in that the decision stage (7) is also based on this stability state.

- 5. Method according to Claim 2, characterized in that it includes, for an image (t), a stage of calculating a disturbance state Dist_Stat(t) (6), on the basis of the disturbance parameters Det_Dist (t) for this image and for the M-1 preceding images (5), a state being declared to be disturbed or not disturbed depending on whether a minimum number L of non-disturbed fields are detected among these M images, M and L being integers such that M > L, and in that the decision stage (7) is also based on this disturbance state.
- 6. Method according to Claim 5, characterized in that it also includes a stage of calculating a stability parameter Det_Stab(t) for the field, on the basis of a comparison (4), over two successive images, of the number of occurrences of the majority vectors of the movement-vectors fields of each of these images, a field being defined as stable if the variation in the number of occurrences lies within a predefined bracket, and in that a vector field is declared to be reliable if a stable field and a non-disturbed state are detected.
- 30 7. Method according to Claim 4, characterized in that it also includes, for an image (t), a stage of calculating a disturbance parameter Det_Dist(t) for the field, on the basis of a comparison (5), over two successive images, of the number of occurrences of the movement vector corresponding to the majority vector of one of the two images (2, 3), a field being defined as

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disturbed if the variation in the number of occurrences lies within a predefined bracket, as well stage of calculating a disturbance state Dist Stat(t) (6) on the basis of the disturbance parameters Det_Dist(t) for this image and for the M-1 (5), a state being declared as preceding images disturbed or not disturbed depending on whether a minimum number Q of non-disturbed fields are detected or not detected among these M images, M and Q being strictly positive integers, and in that a vector field 10 is declared to be reliable if a stable field, a disturbed and stable state are detected.

- 8. Method according to Claim 1, 2 or 3, characterized in that the occurrences of the vectors are relative to the value of the horizontal component of these vectors.
 - 9. Method according to Claim 1, characterized in that the decision stage (7) also takes into account a parameter for the detection of saturation of the movement-vectors field.
 - 10. Method according to Claim 1, characterized in that the decision stage (7) also takes into account a parameter for detection of a change of scene in the video sequence.
- 25 11. Device for detecting reliability of a movement-vector field of one image from an image sequence, characterized in that it includes:
- means (4) for comparing, over two successive images, the number of occurrences of the majority vectors of the movement-vectors fields of each of these images,
 - means for calculating a stability parameter Det_Stab(t) for the field, on the basis of the comparison result, a field being defined as stable if the variation in the number of occurrences lies within a predefined bracket,

- and means for deciding on reliability (7) on the basis of this stability parameter.
- 12. Device according to Claim 11, characterized in that it also includes:
- means (4) for comparing, over two successive images, the number of occurrences of the movement vector corresponding to the majority vector of one of the two images,
- means for calculating a disturbance parameter

 10 Det_Dist(t) for the field, a field being defined as not disturbed if the variation in the number of occurrences lies within a predefined bracket,
 - the means for deciding on reliability (7) also taking this disturbance parameter into account.
- 15 13. Frequency converter, characterized in that it comprises a device according to Claim 11.
 - 14. Video coder, characterized in that it comprises a detection device according to Claim 11.